

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Currently Amended) A process to prepare nanostructured materials comprising the steps of:

generating a plasma using a free-burning electric arc;

introducing an oxidizing gas into the plasma before the plasma is expanded into a field free zone;

injecting a precursor material into the plasma in the area of the plasma before the plasma is expanded into a field free zone through at least one of a current carrying region of an anodic column and a current carrying region of a cathodic column;

transferring energy from the plasma to the precursor material and forming at least one of a stoichiometric-nanostructured material and a vapor that may be condensed to form a stoichiometric-nanostructured material in the area of the plasma before the plasma is expanded into a field free zone; and

recovering the stoichiometric-nanostructured material.
3. (Previously Presented) The process of claim 2, wherein the step of injecting comprises injecting the precursor material into the current carrying region of the cathodic column through forced convection.

4. (Previously Presented) The process of claim 7, wherein the step of introducing comprises introducing the oxidizing gas into the current carrying region of the anodic column of the transferred electric arc.

5. (Currently Amended) The process of claim [[8]]_2, wherein the step of introducing comprises introducing the oxidizing gas into the current carrying region of the anodic column of the free-burning electric arc.

6. (Previously Presented) The process of claim 2, further comprising injecting at least one of a quench and dilution stream into the plasma.

7. (Previously Presented) The process of claim 2, wherein the plasma is generated by a transferred electric arc.

8. (Cancelled)